

In the Office Action the Examiner rejected the claims under 35 U.S.C. 103(a) over Stephen B. Wicker (Error Control System - ISBN 0132008092), further in view of the U.S. patent to Gordon, et al.

In the Examiner's opinion, generally speaking, the present invention can be derived from the combination of the references and is therefore obvious for a person skilled in the art.

Applicants have to respectfully disagree with this position for the following reasons. In applicants opinion the Examiner reads more into the patent to Gordon that what is actually disclosed. Gordon wants to "provide an arrayed disk drive system which provides from none to multi levels of redundancy" (col. 3, lines 1 to 4). In order to do so, Gordon provided means for providing a plurality of levels of redundancy on data read from or written to the arrayed disk drives from the computer (col. 3, lines 53 to 56).

Gordon also teaches how the different levels of redundancy are provided: "The ECC engine 22, in cooperation with the arrayed disk drive system 10 software, provides one or two levels of redundancy to data being stored on the disk drives 14" (col. 4, lines 62 to 65).

"The ECC engine 22... provides up to two levels of redundancy. The redundancy, operation actually include five aspects...the SCSI controller 18...exclusive-OR redundancy information generator...Reed-Solomon redundancy information generator...generation of redundancy syndromes...the disk controller which coordinates the redundancy program" (col. 9, lines 7 to 18).

The Examiner cited the following section "The parity or error detection and correction scheme used by the embedded SCSI controller is generally referred to as Fire Code" (col 7, lines 55 to 57).

Gordon further explains that "if a customer desires one level of redundancy the exclusive-OR redundancy algorithm is enabled. If a customer desires two levels of redundancy both the exclusive-OR redundancy and Reed-Solomon redundancy is provided" (col. 9, lines 23 to 28).

Gordon basically teaches a RAID system (Redundant Arrays of Independent Disks) which may be combined with an additional block code. He points out that

"It is important to note at this point that each time a read is performed not only can the SCSI controller 18 [comment: performing the fire

code] detect an error, the p [comment: i.e., the exclusive-OR] and q [comment: i.e., the Reed-Solomon] redundancy functions can detect errors (col. 11, 1. 29 to 3:2).

Thus, according to Gordon, the SCSI controller 18 performs the fire code error detecting/correcting scheme independently from the 'customer desired zero, one or two level redundancy.' Hence, the different levels of redundancy are not achieved by providing - in operation - different fire code polynomials in order to generate a Variable Redundancy Code. In contrary, the different levels of redundancy are achieved by combining entirely different redundancy schemes (exclusive OR/Reed-Solomon) on top of what is provided by the SCSI controller.

There are many more sections in Gordon, which make clear that the different redundancy levels are not achieved by the fire code. It is not even mentioned that the SCSI controller is changed or even can be changed in order to implement a different fire code.

It is again pointed out that Gordon does not mention fire code in the context of Variable Redundancy. In fact, according to Gordon the redundancy created by the fire code within the SCSI controller is always there, whatsoever.

The present invention is entirely different. According to the present invention one redundancy (error correcting) scheme is used, which by modifying its parameters provides variable redundancy. Gordon's system stacks different, independent redundancy schemes in order to provide different levels of redundancy, which involves more coding and implementation effort.

The publication cited by the Examiner as prior art also does not disclose the above mentioned new features of the present invention.

Therefore, even a combination of this cited prior art with Gordon does not render the present invention obvious.

There are not even hints for a person skilled in the art of how to use such a code in the sense of our application. The fire code is mentioned in the Gordon document in a quite different context which has nothing to do with a variable redundancy.

It is believed to be clear that the references do not teach the new features of the present invention, and these features can not be derived from the references as a matter of obviousness, either singly, or in combination with one another. The only way to arrive at the applicant's invention is to modify the solution proposed in the patent to Gordon, by

changing them significantly, in particular by including into them the new features of the present invention which are now defined in the claims. However, it is known that in order to arrive at a claimed invention, by modifying the references the cited art must itself contain a suggestion for such a modification.

This principle has also been consistently upheld by the U.S. Court of Customs and Patent Appeals which, for example, held in its decision in *re Randol and Redford* (165 USPQ 586) that

Prior patents are references only for what they clearly disclose or suggest; it is not a proper use of a patent as a reference to modify its structure to one which prior art references do not suggest.

Definitely, the references do not contain any hint or suggestion for such modifications.

CONSIDERATION OF INFORMATION DISCLOSURE STATEMENTS

It is noted that Information Disclosure Statements were filed on September 12, 2000 and October 23, 2000. However, these IDS's have not been acknowledged by the Examiner. A Request for Continued Examination was filed on February 7, 2005 and it is requested that the Examiner now acknowledge the previously filed IDS' so that the duty of Disclosure will have been fully met.

The present invention should be considered as patentably distinguishing over the art and should be allowed.

Reconsideration and allowance of the present application is most respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place this case in condition for final allowance, then it is respectfully requested that such amendments or corrections be carried out by Examiner's Amendment, and the case be passed to issue.

Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, he is invited to telephone the undersigned (at 631-549-4700).

Respectfully submitted,



Michael J. Striker
Attorney for Applicants
Reg. No. 27233